

Molly Joseph Ward Secretary of Natural Resources DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949-A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

David K. Paylor Director

Michael P. Murphy Regional Director

STATE WATER CONTROL BOARD ENFORCEMENT ACTION - ORDER BY CONSENT ISSUED TO CHESTERFIELD COUNTY FOR CHESTERFIELD COUNTY DEPARTMENT OF PUBLIC UTILITIES UNPERMITTED DISCHARGE

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code § 62.1-44.15, between the State Water Control Board and Chesterfield County, regarding the Chesterfield County Drinking Water Distribution System, for the purpose of resolving certain violations of the State Water Control Law and the applicable regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

- 1. "305(b) report" means the report required by Section 305(b) of the Clean Water Act (33 United States Code § 1315(b)), and Va. Code § 62.1-44.19:5 for providing Congress and the public an accurate and comprehensive assessment of the quality of State surface waters.
- 2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and 62.1-44.7.

Consent Order Chesterfield County Unauthorized Discharge Page 2 of 10

- 3. "Chesterfield" means Chesterfield County, a political subdivision of the Commonwealth of Virginia. Chesterfield is a "person" within the meaning of Va. Code § 62.1-44.3.
- 4. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
- 5. "DGIF" means the Virginia Department of Game and Inland Fisheries.
- 6. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.
- 7. "Discharge" means discharge of a pollutant. 9 VAC 25-31-10
- 8. "Discharge of a pollutant" when used with reference to the requirements of the VPDES permit program means:
 - a. Any addition of any pollutant or combination of pollutants to surface waters from any point source; or
 - b. Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
- 9. "DO" means dissolved oxygen.
- 10. "DPU" means Department of Public Utilities.
- 11. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.
- 12. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the State Water Control Law.
- 13. "Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC § 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water... 9 VAC 25-31-10.
- 14. "Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational,

Consent Order Chesterfield County Unauthorized Discharge Page 3 of 10

commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution." Va. Code § 62.1-44.3.

- 15. "PRO" means the Piedmont Regional Office of DEQ, located in Glen Allen, Virginia.
- 16. "Regulation" means the VPDES Permit Regulation, 9 VAC 25-31-10 et seq.
- 17. "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of the Va. Code.
- 18. "State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands. Va. Code § 62.1-44.3.
- 19. "TRC" means total residual chlorine.
- 20. "Va. Code" means the Code of Virginia (1950), as amended.
- 21. "VAC" means the Virginia Administrative Code.
- 22. "VPDES" means Virginia Pollutant Discharge Elimination System.

SECTION C: Findings of Fact and Conclusions of Law

- 1. Chesterfield owns and operates the Chesterfield County Drinking Water Distribution System in Chesterfield County, Virginia. Chesterfield County continuously monitors the water quality in the potable water distribution system and performs water distribution system flushing when warranted to ensure potable water quality. There is a water distribution system flushing valve located at the Route 1 bridge over Proctors Creek in Chesterfield County where the water distribution system is able to be flushed.
- 2. Proctors Creek, located in the Lower James River Basin, is listed in DEQ's 305(b) report as impaired of the recreation use due to E. coli exceedances and of the aquatic life use due to an altered benthic community. The source of bacteria impairment was allocated to point sources such as wastewater treatment plants, domestic general permits, and municipal separate storm sewer systems and to nonpoint source runoff such as wildlife, land application, runoff, failing septic systems, and illicit connections.

Consent Order Chesterfield County Unauthorized Discharge Page 4 of 10

- 3. On September 19, 2014, Department staff received a report that fish were dying in Proctors Creek at and downstream of the Route 1 Bridge in Chesterfield County. Department staff arrived at the scene on that day at 3:17 p.m., and met Chesterfield's Department of Environmental Engineering and Office of Water Quality staff members at Proctors Creek below Route 1 to conduct field sampling and a fish kill count. The Department was informed by Chesterfield County that, earlier that day, a potable water line at the bridge was flushed which discharged into Proctors Creek for two hours and 34 minutes from 9:00 a.m. to 11:34 a.m.
- 4. Chesterfield staff informed DEQ staff that there were numerous dead 1 2 inch salamanders in Proctors Creek below Route 1. DEQ obtained field parameters 10 meters below Route 1: Temp = 22.16 °C, pH = 6.90 S.U., DO = 8.27 mg/L and Conductivity = 128 μs/cm. Chesterfield staff obtained a TRC of 1.4 1.6 mg/L at 3:45p.m. Chesterfield staff walked approximately 0.1 mi upstream of Route 1 to obtain a background TRC value, which was non-detect at 4:00p.m. Chesterfield staff also obtained a TRC of 1.6 mg/L 0.15 miles below Route 1 at 4:20p.m. At 5:30 p.m., just downstream of the flush pipe Chesterfield County staff found no trace of TRC.
- 5. DEQ staff analyzed field data in Proctors Creek just above a right bank tributary approximately 0.35 mi below Rt. 1 at 4:50p.m.: Temp = 23.39 °C, pH = 7.18 S.U., DO = 7.68 mg/L, Conductivity = 173 μ s/cm. Chesterfield staff read TRC at 1.0 mg/L here at 5:00p.m.
- 6. DEQ staff analyzed the right bank tributary, which contributed less flow than there was in Proctors Creek, with field parameters: Temp = 22.12 °C, pH=6.97 S.U., DO = 7.88 mg/L, Conductivity = 81 μ s/cm. Chesterfield staff observed TRC = 0.8 mg/L in Proctors Creek a few meters downstream of the right bank tributary, where DEQ staff observed a live energetic 4" bluegill.
- 7. DEQ staff initiated a conservative fish kill count from Rt. 1 downstream approximately 0.4 miles and calculated the replacement of fish costs at \$100.48. The fish kill count total was 106 fish and 32 salamanders; however this is conservative because there were undoubtedly more small fish and salamanders hidden in the rock cobble substrate which could not be seen. Based on the observation, it is apparent that the fish kill was caused by acute chlorine toxicity from the potable water flush. DEQ spent a total of \$255.68 on fish kill investigation costs.
- 8. On October 28, 2014, PRO issued a Notice of Violation to Chesterfield Department of Public Utilities (DPU) for the discharge. On November 24, 2014, the Department met with Chesterfield DPU to discuss the discharge and the NOV. Chesterfield County provided the Department with a detailed response along with a packet of information on corrective action taken to date, even prior to the issuance of the NOV.

Consent Order Chesterfield County Unauthorized Discharge Page 5 of 10

- 9. On December 3, 2014, Chesterfield DPU provided a detailed response to the October 28, 2014, NOV in which it stated that prior to the fish kill, Chesterfield owned two dechlorination diffusers. Chesterfield has taken the following corrective actions in regards to water line flushing: 1) adopted municipal flushing best practices and reviewed American Water Works Association Standard C655-09 Field Dechlorination guidance, 2) reviewed and modified water pressure zones in an effort to minimize the water line flushing requirement that is a result of the confluence of two pressure zones, 3) purchased an additional five dechlorination diffusers, five dechlorination mats and have additional Vita-D-Chlor tablets on order, 4) drafted a handbook on dechlorination for employee training, and 5) prepared a training PowerPoint presentation and trained field staff on dechlorination and provided DEQ a copy of the training sign in sheet.
- 10. Chesterfield DPU submitted documentation of its environmental history and investment in their Environmental Management Systems (EMS). Chesterfield DPU reported it has three sections actively participating in the Virginia Environmental Excellence Program (VEEP) and a fourth section in the process of obtaining acceptance into the program. However, when the fish kill occurred, this section of the County's operations was not participating in VEEP.
- 11. Va. Code § 62.1-44.5 states that: "[E]xcept in compliance with a certificate issued by the Board, it shall be unlawful for any person to discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances."
- 12. The Regulation, at 9 VAC 25-31-50, also states that except in compliance with a VPDES permit, or another permit issued by the Board, it is unlawful to discharge into state waters sewage, industrial wastes or other wastes.
- 13. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.
- 14. The Department has issued no permits or certificates to Chesterfield for discharges from the Chesterfield drinking water distribution system.
- 15. The unnamed tributary of Proctors Creek is a surface water located wholly within the Commonwealth and is a "state water" under State Water Control Law.
- 16. The Regulation, at 9VAC 25-260-140 contains water quality criteria calculated to protect aquatic life from toxic effects. The acute freshwater numerical water quality criteria for TRC is 0.019 mg/L.
- 17. Based on the results of the September 19, 2014, fish kill investigation, the November 24, 2014 meeting, and the documentation submitted on December 3, 2014, the Board concludes that Chesterfield has violated Va. Code 62.1-44.5 and the Regulation, by the unauthorized discharge of chloramine from the drinking water distribution system in a manner that was detrimental to aquatic life.

Consent Order Chesterfield County Unauthorized Discharge Page 6 of 10

18. Chesterfield has submitted documentation, described in C.11 above, that verifies that the violation as described above, has been corrected.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 62.1-44.15, the Board orders Chesterfield, and Chesterfield agrees to:

- 1. Pay a civil charge of \$15,250 within 30 days of the effective date of the Order in settlement of the violations cited in this Order;
- 2. Reimburse DEQ \$255.68 for fish kill investigative costs within 30 days of the effective date of the Order;
- 3. Reimburse DGIF \$100.48 for DGIF fish replacement costs within 30 days of the effective date of the Order; and

Payment shall be made by separate check[s], certified check[s], money order[s] or cashier's check[s] payable to:

- 1. the "Treasurer of Virginia" for the civil charge and for DEQ fish investigative costs (one check);
- 2. the "Department of Game and Inland Fisheries" for the DGIF fish replacement costs (one check);

and delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 1104
Richmond, Virginia 23218

Chesterfield shall include its Federal Employer Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF). If the Department has to refer collection of moneys due under this Order to the Department of Law, Chesterfield shall be liable for attorneys' fees of 30% of the amount outstanding.

Consent Order Chesterfield County Unauthorized Discharge Page 7 of 10

SECTION E: Administrative Provisions

- 1. The Board may modify, rewrite, or amend this Order with the consent of Chesterfield for good cause shown by Chesterfield, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
- 2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the Facility; or (3) taking subsequent action to enforce the Order.
- 3. For purposes of this Order and subsequent actions with respect to this Order only, Chesterfield admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.
- 4. Chesterfield consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
- 5. Chesterfield declares it has received fair and due process under the Administrative Process Act and the State Water Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
- 6. Failure by Chesterfield to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
- 7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
- 8. Chesterfield shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other unforeseeable circumstances beyond its control and not due to a lack of good faith or diligence on its part Chesterfield shall demonstrate that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part Chesterfield shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances

Consent Order Chesterfield County Unauthorized Discharge Page 8 of 10

are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:

- a. the reasons for the delay or noncompliance:
- b. the projected duration of any such delay or noncompliance;
- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which the parties intend to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

- 9. This Order is binding on the parties hereto, and any successors in interest, designees and assigns, jointly and severally.
- 10. This Order shall become effective upon execution by both the Director or his designee and Chesterfield. Nevertheless, Chesterfield agrees to be bound by any compliance date which precedes the effective date of this Order.
- 11. This Order shall continue in effect until:
 - a. The Director or his designee terminates the Order after Chesterfield has completed all of the requirements of the Order;
 - b. Chesterfield petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
 - c. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to Chesterfield.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Chesterfield from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Any plans, reports, schedules or specifications attached hereto or submitted by Chesterfield and approved by the Department pursuant to this Order are incorporated into

Consent Order Chesterfield County Unauthorized Discharge Page 9 of 10

this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.

- 13. The undersigned representative of Chesterfield certifies that he or she is a responsible official [or officer] authorized to enter into the terms and conditions of this Order and to execute and legally bind Chesterfield to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of Chesterfield.
- 14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.
- 15. By its signature below, Chesterfield voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 23 day of UCTOBER, 2015.
Whichael Polante
Michael P. Murphy, Regional Director Department of Environmental Quality
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Consent Order Chesterfield County Unauthorized Discharge Page 10 of 10

Chesterfield County voluntarily agrees to the issuance of this Order.

Notary seal: